

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Previously Presented) A process to identify a user terminal resource or a user of the terminal resource by a server resource in a telecommunication network, using a first identifier, where an asymmetrical algorithm with public key is implemented in the terminal resource, comprising the following steps:

- generating a random number in the user terminal resource,
- determining in the terminal resource a second identifier as a function of the random number, at least from part of the first identifier and from the result of executing the asymmetrical algorithm to which at least the random number is applied,
- transmitting the second identifier to the server resource, and
- in the server resource, retrieving the first identifier at least by executing the asymmetrical algorithm to which a private key and, at least partially, the second identifier are applied, so that the server resource verifies that the first retrieved identifier is written into a memory of the server resource.

2. (Previously Presented) A process according to claim 1, further including the step of authenticating the terminal resource by the server resource subsequent to the steps of claim 1.

3. (Previously Presented) A process according to claim 1, in which the determination in the terminal resource includes application of the generated random number to the asymmetrical algorithm with the public key to produce an encrypted random number, application of the generated random number and the first identifier to a symmetrical algorithm implemented in the terminal resource, to produce an encrypted identifier, and concatenation of the encrypted random number and of the encrypted identifier in the second identifier to be transmitted to the server resource, and wherein the retrieval in the server resource includes application of the encrypted random number to the asymmetrical algorithm with the private key, in order to retrieve the generated random number, and application of the retrieved random number and the encrypted identifier to the symmetrical algorithm, in order to retrieve the first identifier.

4. (Previously Presented) A process in accordance with claim 1, wherein the determination in the terminal resource includes application of the generated random number concatenated to the first identifier, to the asymmetrical algorithm with the public key to produce the second identifier to be transmitted to the server resource, and wherein the retrieval in the server resource includes application of the second identifier to the asymmetrical algorithm with the private key in order to retrieve the first identifier.

5. (Previously Presented) A process according to claim 1, further including the steps of changing the public key and the private key for the asymmetrical algorithm

in the server resource, and downloading the changed public key from the server resource to the terminal resource.

6. (Previously Presented) A process according to claim 1, wherein the generation of the random number is periodic in the terminal resource.

7. (Previously Presented) A process according to claim 1, wherein the generation of the random number occurs following at least one of the following events in the terminal resource : switching on the terminal resource, setting-up a call, setting-up a session between the terminal resource and the server resource, substitution of the server resource for another server resource, or activation of a service application.

8. (Previously Presented) A user terminal resource identifying itself, or identifying a user of the latter, to a server resource, through a telecommunication network, using a first identifier, an asymmetrical algorithm with a public key implemented in the terminal resource, comprising:

- a resource to generate a random number, and
- a resource to determine a second identifier as a function of the random number, at least from part of the first identifier and from the result of executing the asymmetrical algorithm to which at least the random number is applied in order to transmit the second identifier to the server resource, which retrieves the first identifier at least by executing the asymmetrical algorithm to which a private key and, at least partially, the second identifier are applied, and which

verifies that the first retrieved identifier is written into a memory of the server resource.

9. (Previously Presented) A user terminal resource according to claim 8, wherein the resource to generate a random number and the resource to determine a second identifier are included in a portable electronic object of the chip card type.

10. (New) A method for identifying at least one of a terminal and a user of the terminal to a server in a telecommunications network, comprising the following steps:

generating a random number in the terminal;

applying said random number and a first identifier associated with said terminal to at least one asymmetric algorithm in said terminal, using a public key, to generate a second identifier that is based upon a combination of said random number and said first identifier;

transmitting said second identifier to said server;

applying said second identifier to said asymmetric algorithm in said server, using a private key, to derive said first identifier; and

authenticating said terminal or said user in the server, using the derived first identifier.

11. (New) The method of claim 10, wherein said random number is applied to said asymmetric algorithm in said terminal, together with said public key, to generate a first result, and said first identifier is applied to a second, different

algorithm in said terminal, together with a key, to generate a second result, and wherein said second identifier comprises a combination of said first and second results.

12. (New) The method of claim 11, wherein second algorithm is a symmetric algorithm.

13. (New) The method of claim 11, wherein said second identifier comprises a concatenation of said first and second results.

14. (New) The method of claim 10, wherein said random number is combined with said first identifier, and the combination of said random number and said first identifier is applied as an input to said asymmetric algorithm in said terminal, together with said public key, to generate said second identifier.

15. (New) The method of claim 14, wherein said combination comprises a concatenation of said random number and said first identifier.